

# NSF, Minority-Serving Institutions, and Basic Research in the Social, Behavioral, and Economic Sciences

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# Introduction to SBE

#### SBE's Mission



- To promote the understanding of people and their lives by supporting research that reveals basic facets of human behavior
- To encourage research that addresses important societal questions and problems

\*\*Basic\*\* Science

#### Three Divisions within SBE

- Behavioral & Cognitive Sciences (BCS)
- Social & Economic Sciences (SES)
- National Center for Science & Engineering Statistics (NCSES)

## **Behavioral and Cognitive Sciences (BCS)**



- Archaeology and Archaeometry
- Biological Anthropology
- Cultural Anthropology
- Cognitive Neuroscience
- Developmental and Learning Sciences

- Documenting Endangered Languages
- Geography and Spatial Sciences
- Linguistics
- Perception, Action, & Cognition
- Social Psychology

# Social and Economic Sciences (SES)



- Decision Risk and Management
   Science of Organizations Sciences
- Economics
- Law and Social Sciences
- Methodology, Measurement, and Statistics
- Political Science

- Science, Technology, and Society
- Secure and Trustworthy Cyberspace
- Sociology

#### **SBE-Wide Programs and Solicitations**

- Science of Learning
- Science of Science and Innovation Policy
- Resource Implementation for Data Intensive Research in SBE (RIDIR)
- Science of Broadening Participation

#### Some Relevant Cross-Directorate Initiatives

- Integrative Strategies for Understanding Neural and Cognitive Systems
- Cyberlearning and Future Learning Technologies
- Innovations at the Nexus of Food, Water, and Energy
- Dynamics of Coupled Natural and Human Systems
- INCLUDES
- ADVANCE
- HBCU-UP

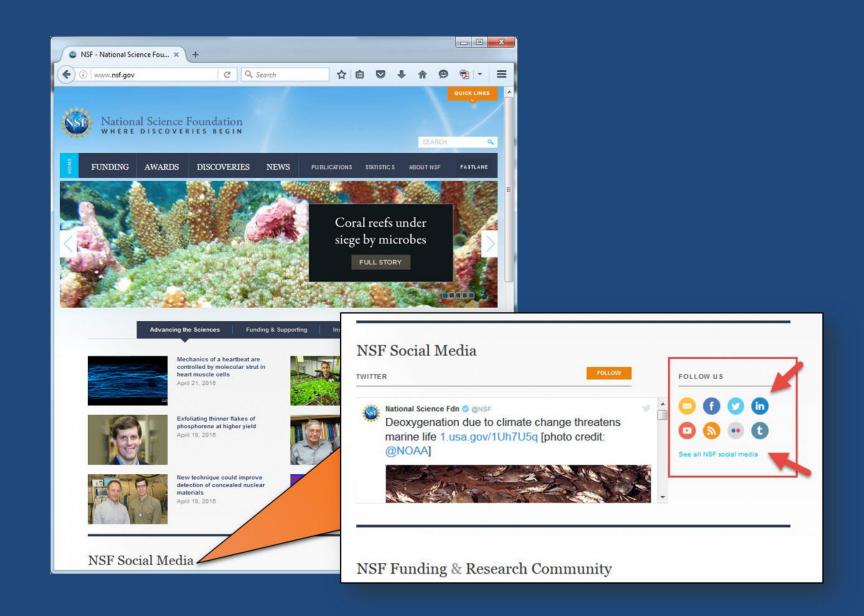
# Stay in the Loop

- Dear Colleague Letters
- Special Competitions and Investment Areas
- NSF Website has links to NSF Social Media



#### **NSF** Website

- Visit the <u>NSF website at</u> <a href="http://www.nsf.gov">http://www.nsf.gov</a>
- Follow us on Social Media
  - Social Media section on the NSF homepage



#### Kinds of proposals (mechanisms)

- Standard research grants
- Research at Undergraduate Institutions (RUI) awards
- CAREER awards
- High risk awards (EAGER, RAPID)
- Doctoral Dissertation Research Improvement grants\*
- Training programs
  - Graduate Research Fellowships
  - Post-doctoral Fellowships
  - Research Experiences for Undergraduates
- Workshops
- Major Research Instrumentation (MRI) Awards
- Research Coordination Networks (RCNs)



# Faculty Early Career Development Program (CAREER)

- Pre-tenure but tenure-track (or equivalent) faculty
- Integration of research and education
- Single investigator proposal No Co-PIs
- Minimum \$400,000 over 5 years\*
- Maximum of three submissions (one per year)
- Deadline: mid to late July

# **Anatomy of a Proposal**

#### **Proposal Components**

- Cover Page
- Project Summary (1 page)
- Table of Contents (auto-generated)
- Project Description (15 pages)
- References Cited
- Biographical Sketches (for all senior personnel)
- Budget
- Current and Pending Support
- Facilities, Equipment, and Other Resources
- Post-doctoral mentoring plan (if applicable)
- Data management plan
- Supplementary Documentation (if applicable no letters of support)



#### **Cover Sheet**

- Program Announcement Number
- Auto Assigned NSF Proposal Number
- NSF Organization for Consideration
- Performing Institution
- Project Title
- Requested Amount
- PI Information

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# **Project Summary (1 page)**

- Overview
- Statement of Intellectual Merit
- Statement of Broader Impacts

# **Project Description (15 pages)**

- What's the question?
- Why it's important to answer it
- How you plan to answer it
- What implications it will have
- Must include a statement of broader impacts and a section addressing result from prior NSF support

#### Biosketches

- For all senior personnel
- 2 pages max.
- Professional Preparation
- Appointments (starting with current)
- Publications (10 max: 5 most relevant, 5 other significant papers)
- Synergistic activities (training, outreach, professional service)
- Collaborators and Other Affiliations\*

#### Budget

#### • Size:

- Reasonable for project
- Aligned with typical award size for the program
- Well-justified and not padded
- Consistent with program/solicitation guidelines

#### • Eligible Costs:

- Personnel (PI, Co-PI, Consultants, Research Staff, Students)
- Equipment
- Travel
- Participant recruitment/compensation
- Supplies and services as needed

Indirect costs are included in overall budget - rate is negotiated between Govt and your institution

#### Post-doctoral mentoring plan

- 1 page max. description of how Post-Doc will be mentored
- Research training
- Networking and career counseling
- Training in grant writing, publications and presentations
- Support for development of teaching and mentoring skills
- Training in responsible conduct of research

#### **Data Management Plans**

- What kinds of data, software and other materials will your research generate?
- How will you manage it? (e.g. metadata standards, standards for format, content, migration, etc.)
- How will you give others access to your data, preserving confidentiality, security, intellectual property & other rights/requirements?
- How will you archive data and preserve access?

\*\*Not "one size fits all" \*\*

# **Supplementary Documentation**

- RUI documents
- Letters of commitment from collaborating organizations
- Other information that establishes feasibility
- Note: We generally give you the benefit of the doubt
- NO letters of support

# **Breaking Down the Review Process**

#### **Proposal Processing**



- PI writes and uploads proposal documents to FastLane or Research.gov
- Sponsored Research Office submits proposal on behalf of institution
- Compliance check
- Review of proposal
- Program Director Recommendation
- Division Director Review of Recommendation
- If award, Division of Grants and Agreements vets and issues award notice

#### **Types of Reviewers**

- Ad hoc reviews Experts on the proposal topic
- Advisory panels Representing various topic areas in the discipline
- Internal review by NSF Program Directors

\*\*Panels (and reviewers) are Advisory\*\*

#### Official NSF review criteria

- Intellectual Merit:
  - Importance of topic
  - Qualifications
  - Creativity & originality
  - Transformative?
  - Conception & organization
  - Feasibility

- Broader Impacts:
  - Training
  - Mentoring
  - Diversity
  - Infrastructure
  - Dissemination/Public awareness
  - Societal Benefits

#### **NSF** Review structure and content

- Provide a rating: Excellent, Very Good, Good, Fair, Poor
- Description of strengths and weaknesses
- Separate analysis of:
  - Intellectual Merit
  - Broader Impacts
  - Any Solicitation Specific Criteria
- Summary statement of overall assessment

#### **Co-review**

- Submit one proposal for consideration by multiple programs
- Choose programs on cover page, \*\*top choice first\*\*
- Decision to co-review is at the discretion of the program directors
- Reviews from multiple perspectives
- Both fund, neither fund, one funds

#### **Secrets to Success**

## Talk to a Program Director!



- Get in touch early in the process (and well before the deadline)
- Send an email rather than cold-calling
- Include a one-page summary of the project
- Ask for feedback on how the project fits with program priorities
- Inquire whether there are other programs or initiatives (such as DCLs) that are relevant
- If a proposal is declined, schedule a follow-up chat to get feedback on whether and if so how to revise

#### Pitfalls to avoid



- Overlooking key aspects of the program announcement and requirements \*\*READ CAREFULLY\*\*
- Lacking specificity about method, predictions, analysis plan
- Disconnect between framing/motivation and proposed activity
- Failing to establish feasibility
- Writing exclusively for an expert audience
- Submitting without feedback from colleagues or mentors

# **Questions?**

Please submit any additional questions to:

SBE-MSI-Outreach@nsf.gov